

REMARKS

Rejection of claims 1-19 under 35 U.S.C. §103(a) as being unpatentable over Bale in view of Leung

The Examiner rejected claims 1-19 under 35 U.S.C. §103(a) as being unpatentable over Bale in view of Leung.

Claim 1

In rejecting claim 1, the Examiner states that Bale teaches:

an object oriented class replacement mechanism residing in the memory and executed by the at least one processor that generates an instance of a selected class by using a key that includes context information to access the appropriate entry in the class configuration data (col. 1, lines 60-67, col. 2, lines 1-49 and col. 7 lines 10-67).

Applicant readily admits that Bales teaches an object oriented class substitution mechanism that generates an instance of a selected class. However, Bale does not teach any mechanism that generates an instance of a selected class *by using a key that includes context information to access the appropriate entry in the class configuration data*, as expressly recited in claim 1. The Examiner has shown no teaching in Bale that corresponds to the key or context information in claim 1. For this reason, the Examiner has failed to establish a prima facie case of obviousness for claim 1 under 35 U.S.C. §103(a) based on the combination of Bale and Leung.

The Examiner further states in the rejection:

Bale does not explicitly indicate “each class configuration entry including a key-value pair, wherein the key includes information relating to a

selected processing context and the value includes configuration data for a class in the selected processing context.”

However, Leung discloses key-value pair and a selected processing context as claimed (col. 13, lines 38-67 and col. 14 lines 1-31; and col. 13, lines 1-37).

Applicant respectfully asserts that the Examiner’s contention that Leung discloses a key-value pair and a selected processing context as claimed is incorrect. The applicable portion of claim 1 states:

class configuration data comprising a plurality of entries residing in the memory, each class configuration entry including a key-value pair, wherein the key includes information relating to a selected processing context and the value includes configuration data for a class in the selected processing context;

The key-value pairs in Leung are contained within an array in the TAnything class. The TAnything file format is shown in TABLE 2 in col. 11 of Leung. The keys in Leung are slot names, which have corresponding values. One specific example of a TAnything file is shown in TABLE 3 in col. 11. Each key-value pair includes a slot name (such as “/Domain”, “/Category”, etc.), and a corresponding value. We see from both TABLES 2 and 3 that the key is merely a label that is used to access the attribute value. In claim 1, however, the key “includes information relating to a selected processing context.” In Leung the keys are labels that do not include information relating to a selected processing context. The keys in Leung are simple labels that do not provide any information about any processing context. For this reason, the key-value pairs in Leung do not read on the key-value pair in claim 1.

In the rejection, the Examiner does not state what teaching in Leung allegedly reads on the processing context in claim 1. Should the Examiner decide to maintain his rejection of claim 1 based on the combination of Bale and Leung, applicant respectfully requests that the Examiner specifically identify which teaching in Leung allegedly reads

on the processing context in claim 1 so the merits of the Examiner's rejection may be properly addressed in future responses and on appeal, if necessary.

Combination of Bale and Leung does not teach all limitations in claim 1

Bale teaches class replacement. Leung teaches key-value pairs for attributes of a class. Combining Bale and Leung would result in the class configuration data of Bale containing key-value pairs of labels and class attributes. The result of combining Bale with Leung is the class replacement system of Bale with a particular file format for class attributes as taught by Leung. This does not read on the limitations in claim 1, which include:

an object oriented class replacement mechanism residing in the memory and executed by the at least one processor that generates an instance of a selected class by using a key that includes context information to access the appropriate entry in the class configuration data.

The reasonable combination of Bale and Leung explained above still does not teach a class replacement mechanism "that generates an instance of a selected class by using a key that includes context information to access the appropriate entry in the class configuration data", as recited in claim 1. As stated above, the keys in Leung do not include context information. For this reason, the combination of Bale and Leung cited by the Examiner do not teach all limitations in claim 1.

Combination of Bale and Leung would not have been obvious to one of ordinary skill in the art

Bale is directed to a system that permits class substitution, instance redirection and class redirection at run time (See Bale Abstract, lines 1-4). Leung, in contrast, is directed to a system for adding classes to a framework of classes, and accessing the classes in the framework. While both are object oriented systems that deal with classes

and instances of classes, applicant respectfully asserts that combining Bale and Leung as suggested by the Examiner would not have been obvious to one of ordinary skill in the art.

As stated in the previous section of this response, the result of combining Bale with Leung is the class replacement system of Bale with a particular file format for class attributes as taught by Leung. The file format as taught in Leung (key-value pairs) is needed in Leung to allow searching attributes of classes to determine whether a particular class is present in the class library. In Bale, class replacement is performed by changing pointers that point to the old class to point instead to the substitute (or replacement) class. The format of the class configuration data in Bale does not affect the manner of performing class substitution in Bale, so why would one of ordinary skill in the art be motivated to provide class configuration data in a particular format as taught by Leung in the system of Bale? The answer: one wouldn't. The format of the configuration data in Bale does not affect the class substitution in Bale, so one of ordinary skill in the art would not be motivated to format the configuration data in Bale using the key-value pairs in Leung.

The keys in Leung are used to process queries by client applications that need to know if a particular class has been installed in the class library. In Bale, there is no teaching of a need to query class attributes. For this reason, the keys in Leung would not be needed in Bale. When a class needs to be replaced in Bale, pointers are changed to direct requests to the new class. No querying of attributes is performed in Bale. For these reasons, applicant respectfully asserts that combining the teachings of Bale and Leung as suggested by the Examiner would not have been obvious to one of ordinary skill in the art.

Summary for Claim 1

As stated in the preceding paragraphs, the key-value pairs in Leung do not read on the key-value pair in claim 1, the combination of Bale and Leung do not teach all limitations in claim 1, and the combination of Bale and Leung would not have been obvious to one of ordinary skill in the art. For these reasons, claim 1 is allowable over the combination of Bale and Leung, and applicant respectfully requests reconsideration of the Examiner's rejection of claim 1 under 35 U.S.C. §103(a).

Claim 2

In rejecting claim 2, the Examiner states that Bale discloses a key that comprises context information appended to a class identifier. This is a very interesting rejection. In rejecting claim 1, the Examiner cites to Leung as allegedly teaching the key-value pairs. Now in rejecting claim 2, the Examiner states that Bale teaches the key of claim 1 (which was allegedly taught by Leung) with specific properties. The result is a key taught in Leung with properties of the key taught in Bale, when Bale doesn't even teach a key. This doesn't make sense. Nowhere does Bale teach the key-value pair taught in claim 1. Nowhere does Bale teach classes that are specific to particular processing contexts. In carefully reviewing the citations in Bale providing by the Examiner in rejecting claim 2, there is no language that supports any teaching of a key that comprises context information appended to a class identifier. For this reason, claim 2 is allowable over the combination of Bale and Leung. In addition, claim 2 depends on claim 1, which is allowable for the reasons given above. As a result, claim 2 is also allowable as depending on an allowable independent claim. Applicant respectfully requests reconsideration of the Examiner's rejection of claim 2 under 35 U.S.C. §103(a).

Claim 3

In rejecting claim 3, the Examiner states that Bale does not explicitly indicate “wherein the class identifier comprises a class token that comprises a text string”, but states that Leung discloses a class token that comprises a text string as claimed. While Leung may disclose a class identifier that comprises a text string, this does not take into account all of the limitations of claim 3, which include the limitations in claim 2 and claim 1 by dependency. The key in claim 1 includes information related to a selected processing context. The key in claim 2 comprises context information appended to a class identifier. The key in claim 3 comprises the context information appended to a class token that comprises a text string. Again, the reliance in Leung in rejecting claim 3 is curious in light of the Examiner’s reliance on Bale in rejecting claim 2. How can Leung teach specific attributes of a key that is supposedly taught in Bale?

The language of Leung cited by the Examiner does not teach or support a key that comprises context information appended to a class token that comprises a text string, as recited in claim 3. For this reason, claim 3 is allowable over the combination of Bale and Leung. In addition, claim 3 depends on claim 1, which is allowable for the reasons given above. As a result, claim 3 is also allowable as depending on an allowable independent claim. Applicant respectfully requests reconsideration of the Examiner’s rejection of claim 3 under 35 U.S.C. §103(a).

Claim 5

Claim 5 recites a key generator mechanism that generates the key from a class identifier and from the context information. The rejection of claim 5 only addresses “the context information.” Because the Examiner has not addressed the key generator mechanism in claim 5, the Examiner has failed to establish a prima facie case of obviousness for claim 5 under 35 U.S.C. §103(a). Applicant respectfully asserts that

neither Bale nor Leung teach or suggest a key generator mechanism that generates a key from a class identifier and from the context information. To the contrary, the keys cited by the Examiner in Leung in rejecting claim 1 are simple labels. The keys in Leung thus expressly teach away from keys that are generated from a class identifier and from context information, as recited in claim 5. For these reasons, claim 5 is allowable over the combination of Bale and Leung. In addition, claim 5 depends on claim 1, which is allowable for the reasons given above. As a result, claim 5 is also allowable as depending on an allowable independent claim. Applicant respectfully requests reconsideration of the Examiner's rejection of claim 5 under 35 U.S.C. §103(a).

Claim 7

In rejecting claims 7 and 8, the Examiner simply states: "With respect to claims 7-8, Bale discloses a method for creating an instance of an object-oriented class as discussed in claim 6." Even if this statement were true (which it is not), the language of the rejection does not address the limitation in claim 7 of a step for storing configuration data with the corresponding key. For this reason, the Examiner has failed to establish a prima facie case of obviousness for claim 7 under 35 U.S.C. §103(a). Applicant respectfully asserts that neither Bale nor Leung teach the step of storing configuration data with a key that includes information relating to a selected processing context, as stated in claim 7. For this reason, claim 7 is allowable over the combination of Bale and Leung. In addition, claim 7 depends on claim 6, which is allowable for the reasons given above. As a result, claim 7 is also allowable as depending on an allowable independent claim. Applicant respectfully requests reconsideration of the Examiner's rejection of claim 7 under 35 U.S.C. §103(a).

Claim 8

In rejecting claims 7 and 8, the Examiner simply states: "With respect to claims 7-8, Bale discloses a method for creating an instance of an object-oriented class as discussed in claim 6." Even if this statement were true (which it is not), the language of the rejection does not address the limitation in claim 8 of generating a key from a class identifier and from context information. For this reason, the Examiner has failed to establish a prima facie case of obviousness for claim 7 under 35 U.S.C. §103(a). Applicant respectfully asserts that neither Bale nor Leung teach the step of generating a key from a class identifier and from the context information, as stated in claim 8. To the contrary, the labels in Leung cited as the keys in rejecting claim 1 are not generated from a class identifier and from the context information. The simple labels in Leung expressly teach away from generating a key from a class identifier and from context information, as recited in claim 8. For these reasons, claim 8 is allowable over the combination of Bale and Leung. In addition, claim 8 depends on claim 7, which depends on claim 1, which is allowable for the reasons given above. As a result, claim 8 is also allowable as depending on an allowable independent claim. Applicant respectfully requests reconsideration of the Examiner's rejection of claim 8 under 35 U.S.C. §103(a).

Claims 6, 12 and 13

The remaining independent claims, claims 6, 12 and 13, all recite a key that includes information relating to a selected processing context. As stated above for claim 1, neither Bale nor Leung teach a key that includes information relating to a selected processing context. For the many reasons given above for claim 1, claims 6, 12 and 13 are also allowable, and applicant respectfully requests reconsideration of the Examiner's rejection of claims 6, 12 and 13 under 35 U.S.C. §103(a).

Claims 9 and 16

Claims 9 and 16 include limitations that are similar to those found in claim 2. As a result, claims 9 and 16 are allowable for the same reasons given above for claim 2. In addition, claim 9 depends on claim 6, and claim 16 depends on claim 13, which are allowable independent claims. As a result, claims 9 and 16 are also allowable as depending on allowable independent claims. Applicant respectfully requests reconsideration of the Examiner's rejection of claims 9 and 16 under 35 U.S.C. §103(a).

Claims 10 and 17

Claims 10 and 17 include limitations that are similar to those found in claim 3. As a result, claims 10 and 17 are allowable for the same reasons given above for claim 3. In addition, claims 10 and 17 depend on claims that are allowable for the reasons above, and are therefore allowable as depending on allowable independent claims. Applicant respectfully requests reconsideration of the Examiner's rejection of claims 10 and 17 under 35 U.S.C. §103(a).

Claims 11 and 19

Claims 11 and 19 include limitations that are similar to those found in claim 5. As a result, claims 11 and 19 are allowable for the same reasons given above for claim 5. In addition, claims 11 and 19 depend on claims that are allowable for the reasons above, and are therefore allowable as depending on allowable independent claims. Applicant respectfully requests reconsideration of the Examiner's rejection of claims 11 and 19 under 35 U.S.C. §103(a).

Claims 4, 14 and 15

Each of claims 4, 14 and 15 depend on an independent claim that is allowable for the reasons given above. As a result, claims 4, 14 and 15 are allowable as depending on allowable independent claims, and applicant respectfully requests reconsideration of the Examiner's rejection of claims 4, 14 and 15 under 35 U.S.C. §103(a).

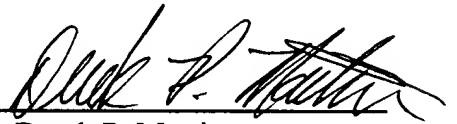
Conclusion

In summary, none of the cited prior art, either alone or in combination, teach, support, or suggest the unique combination of features in applicant's claims presently on file. Therefore, applicant respectfully asserts that all of applicant's claims are allowable. Such allowance at an early date is respectfully requested. The Examiner is invited to telephone the undersigned if this would in any way advance the prosecution of this case.

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Respectfully submitted,

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